

# Mathematics Task 2 – Student Samples

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## Mathematics Task 2 Ontario

Estimate the area of Ontario using the map scale. Show your work and explain how you made your estimate. (You can draw over the map if it helps with your estimation.)

$$A = (300 + 300 + 100)(300 + 300 + 300 + 100)$$

$$A = 700000 \text{ km}^2$$

$$B = (300 + 100)(300 + 300)$$

$$B = 240000 \text{ km}^2$$

$$\text{Ontario} = A + B$$

$$\text{Ontario} = 700000 + 240000$$

$$\text{Ontario} = 7240000 \text{ km}^2$$

∴ Ontario's area is approximately 7,240,000 km<sup>2</sup> in size.



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$$\begin{aligned}
 T_1 \\
 A &= \frac{bh}{2} \\
 &= \frac{400(600)}{2} \\
 &= 120000 \text{ km}^2
 \end{aligned}$$

$$\begin{aligned}
 T_2 \\
 A &= \frac{bh}{2} \\
 &= \frac{700(600)}{2} \\
 &= 210000 \text{ km}^2
 \end{aligned}$$

$$\begin{aligned}
 T_3 \\
 A &= \frac{bh}{2} \\
 &= \frac{900(300)}{2} \\
 &= 135000 \text{ km}^2
 \end{aligned}$$

$$\begin{aligned}
 R_1 \\
 A &= lw \\
 &= 900(700) \\
 &= 630000 \text{ km}^2
 \end{aligned}$$

Total Area

$$T_1 + T_2 + T_3 + R_1 = \text{TA}$$

$$120000 + 210000 + 135000 + 630000 = 1095000 \text{ km}^2$$

∴ the total  
Area of Ontario  
is 1095000 km<sup>2</sup>

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I estimate the area  
of Ontario is 1200 km<sup>2</sup>

I estimate the area  
of Ontario is about  
12000 km<sup>2</sup>.



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Estimate the area of Ontario using the map scale. Show your work and explain how you made your estimate. (You can draw over the map if it helps with your estimation.)

$$\begin{aligned} A = & 600\text{ km} + 300\text{ km} + 200\text{ km} + 300\text{ km} + \\ & 300\text{ km} + 300\text{ km} + 100\text{ km} + 50\text{ km} + 50\text{ km} + \\ & 50\text{ km} + 10\text{ km} + 300\text{ km} + 250\text{ km} + 10\text{ km} + \\ & 300\text{ km} + 50\text{ km} + 400\text{ km} + 600\text{ km} + \\ & 400\text{ km} + 400\text{ km} \end{aligned}$$

$$= 4360 \text{ km}^2$$

∴ The area of Ontario

is approximately  $4360 \text{ km}^2$ .





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$$5\text{cm} = 100\text{km}$$

$$9\text{cm} = 1800\text{km}$$

- there is approximately 1800 in Ontario

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Estimate the area of Ontario using the map scale. Show your work and explain how you made your estimate. (You can draw over the map if it helps with your estimation.)

$$\begin{aligned} A &= L \times W \\ &= 750000 \text{ km}^2 \end{aligned}$$

W = 625  
L = 1200

∴ The area of length Ontario = 750000 km<sup>2</sup> let W rep width

I made my estimate by measuring the length and width of Ontario using the map scale. Then I plugged it into the Area equation,  $L \times W$ , which gave me an answer of 750000 km<sup>2</sup>.

